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AP - JP19980173660 19980619
CPY - ISHI
- KINZ
DC - E36 J01 M13
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M3 - [01] C101 C550 C810 M411 M720 M903 M904 M910 N104 N163 N164 Q431 Q463
Q464; R01532-K R01532-P; 1532-P
PA - (ISHI) ISHIKAWAJIMA HARIMA HEAVY IND
- (KINZ) NIPPON KINZOKU IND CO LTD
PN - JP2000005580 A 20000111 DW200013 B01D71/02 007pp
PR - JP19980173660 19980619
XA - C2000-043788
XIC - B01D-069/12 ; B01D-071/02 ; C01B-003/56
AB - JP2000005580 NOVELTY - A composite hydrogen permeation film is formed
by joining and composing palladium or palladium alloy film with
metallic porous board in the hydrogen separation apparatus.
- DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for the
following: (i) manufacture of composite hydrogen permeation film which
involves using palladium or palladium alloy film by plating,
deposition or sputtering on a metal substrate and forming foil of
palladium or palladium alloy. The formed foil is peeled off and the
metal powder is baked and forms a porous board. A pressure of 10 or
less N/mm² is applied and is joined and composed in non-oxidizing gas
atmosphere including exfoliative foil and porous board in the vacuum
of 500-1000 deg. C. (ii) repairing the pinhole produced on the
composite hydrogen permeation film. A solvent is added to palladium or
palladium alloy of 1 μ m or less particle size and sets as a paste
shape. After the paste closes the pinhole produced in palladium or
palladium alloy film, then heated in non-oxidizing atmosphere
containing vacuum of 400-900 deg. C.
- USE - None given.
- ADVANTAGE - High rate of hydrogen permeation is maintained using the
palladium or palladium alloy thin film. The composite hydrogen
permeation film having pressure resistance which joins the
reinforcement material so that a thin palladium film bears
differential voltage. The pinhole formed is repaired. A very thin film
is obtained.
- (Dwg.0/4)
CN - R01532-K R01532-P
DRL - 1532-P
IW - COMPOSITE HYDROGEN PERMEATE FILM PRESSURE RESISTANCE MAINTAIN HIGH
RATE HYDROGEN PERMEATE FORMING JOIN COMPOSE PALLADIUM PALLADIUM ALLOY
FILM METALLIC POROUS BOARD HYDROGEN SEPARATE APPARATUS
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NC - 001

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OPD - 1998-06-19

ORD - 2000-01-11

PAW - (ISHI) ISHIKAWAJIMA HARIMA HEAVY IND
- (KINZ) NIPPON KINZOKU IND CO LTD

TI - Composite hydrogen permeation film having pressure resistance and maintains high rate of hydrogen permeation - is formed by joining and composing palladium or palladium alloy film with metallic porous board in the hydrogen separation apparatus